INTERNATIONAL FINANCE

Policy Implications of the Tequila Effect

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The problem starts with the countries that export capital, and the solution lies with flexible capital controls.

atin America has been strongly affected by the shifts in capital flows over the past twenty years. During the ■ 1970s, a large supply of debt and equity funds was made available to the region; then, during the 1980s, there was a serious shortage of financing, as the region became a net exporter of funds. Between 1991 and 1994, it became a net recipient of large amounts of funds again, only to experience another sharp reduction of the flows in late 1994 and early 1995, then a renewed access followed in 1996–97. On all these occasions, the shifts began first in the international markets and eventually had a strong impact on the national economies. Whenever there was an abundance or a shortage of funds, costly adjustments had to be made in the domestic markets.

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Table 1

Gross Domestic Product (annual growth rates, percentages)

	1970–80	1980–90	1990–94	1995	1996	1997ª
Argentina	2.8	-0.9	7.7	-5.0	3.5	8.0
Brazil	8.6	1.6	2.3	3.9	3.1	3.5
Chile	2.5	2.8	6.8	8.2	7.2	6.5
Colombia	5.4	3.7	4.0	5.9	2.2	3.0
Mexico	6.7	1.7	2.6	-6.6	5.2	7.0
Peru	3.9	-1.2	4.9	7.8	2.5	7.0
Uruguay	3.0	0.5	4.7	-2.3	4.8	6.5
Latin America (19)	5.6	1.2	3.6	0.1	3.5	5.3

Source: ECLAC, based on official figures for 19 countries, expressed in 1980 U.S. dollars. ^aPreliminary figures.

By contrast, the successful emerging economies of Asia appeared to be immune to the instability associated with capital surges. However, recent events in Asian markets have shown that this is not so anymore.

Capital Flows to Latin America

During the 1990s, capital inflows helped improve the economy in Latin America as they did in Asia. However, rather than contributing to an increase of productive capacity, these inflows merely allowed a recovery of economic activity from the recession that still prevailed at that time in most Latin American countries. The rate of growth in the gross domestic product (GDP) increased from 1.2 percent in the 1980s to 3.6 percent between 1990 and 1994 (see Table 1). This growth was meager, however, and was accompanied by only a modest recovery of investment (see Table 2). The comparison with the previous "golden age" was shockingly poor. During the three decades from 1950 to 1980, Latin America had an average annual growth rate of 5.5 percent; this dynamic growth lasted beyond that of the industrial

Table 2 **Gross Fixed Capital Formation** (percentages of GDP at 1980 prices)

	1983–90	1991	1992	1993	1994	1995	1996
Argentina	16.5	15.4	18.6	19.9	22.0	19.3	20.3
Brazil	16.5	14.2	13.2	13.7	14.6	15.9	15.4
Chile	15.3	17.2	19.6	21.7	21.6	23.0	24.1
Colombia	15 <i>.</i> 7	12.6	13. <i>7</i>	17.7	19.1	20.1	18.4
Mexico	17.1	19.6	21.1	20.7	21.7	16.4	18.3
Latin America							
(19)	16.8	16.3	17.4	18.0	18.8	18.0	18.2

Source: ECLAC, based on official figures. Figures for 1995 and 1996 are very preliminary.

countries, since it covered all the 1970s. Domestic investment increased rapidly in the early period as a source of that vigorous growth. Subsequently, in the 1980s the investment ratio dropped dramatically (7 percentage points of GDP) with a very mild recovery in the 1990s. In fact, investment grew much less during the first half of the 1990s than did capital inflows; thus, most of the external flows financed increased consumption and crowded out domestic savings.

During both the 1970s and 1990s the net capital inflow was substantial, totaling close to 5 percent of GDP in 1976-81 and 1991-94. In both periods, the current account deficit rose sharply (see Table 3), and exchange rates rose (see Table 4); naturally, as the terms of trade deteriorated, imports expanded more rapidly than exports and external liabilities increased steadily. Indeed, all the variables taken together reflect a growing macroeconomic imbalance. Those recipient countries that had large current account deficits and rising exchange rates became increasingly vulnerable to external creditors, who, given the high exposure of financial assets placed in the region, subsequently became more sensitive to any "bad news." This was particularly the case in Mexico, where the situation evolved

Table 3

Deficit on Current Account (millions of dollars per year)

	1983-90	1991	1992	1993	1994	1995	1996	1997
Argentina	1,413	647	6,546	7,363	10,070	2,500	4,000	9,800
Brazil	1,554	1,443	(6,140)	608	1,451	18,000	24,400	33,800
Chile	1,101	287	1,065	2,421	1,045	450	3,200	3,500
Colombia	668	(2,363)	(925)	2,081	2,833	4,100	4,800	4,800
Mexico	592	14,995	24,919	23,487	29,165	1,600	1,900	6,600
Peru	932	1,649	2,143	2,217	2,734	4,700	4,000	3,800
Latin Amer	ica							
(19)	7,956	18,901	36,915	45,895	48,919	34,900	38,100	62,500
L.AVenez	uela							
(18)	9,653	20,670	33,168	43,679	53,051	36,900	46,800	68,300

Source: ECLAC, based on official figures. The balance on current account includes private unrequited transfers as current income. In 1994, these amounted to US\$9.5 billion in the region. Public transfers, which totaled US\$2.5 billion, are excluded.

into a balance of payments and domestic crisis in December 1994.

The flow of international financial resources has increased dramatically in recent years, and a very high percentage of this financing is short-term and highly volatile. During the current decade there has been more diversification than during the 1970s, but the situation is potentially more unstable, inasmuch as the trend has been to move from medium-term bank credit to investments in liquid stocks, bonds, and deposits. When creditors discover an emerging market, they start out with non-existent exposure. Then, they generate a series of consecutive flows that accumulate in rapidly increasing stocks. The creditor's sensitivity with regard to bad news increases remarkably with the level of stocks offered in a country (or region), and with the degree of the debtor's dependence on additional flows (current account deficit plus refinancing of maturing liabilities).

This volatility is also due both to the lack of macroeconomic coordination between the nations that have the greatest influ-

Table 4

Real Exchange Rate Indexes (1987-90 = 100)

, -	1983–86	1987-90	1991	1992	1993	1994	1995	1996	1997a
Argentina	78.5	100.0	67.3	62.6	60.1	63.3	70.3	71.9	69.3
Brazil	117.2	100.0	93.2	100.5	8.06	73.1	55.5	51.1	49.2
Chile	8.89	100.0	100.1	9.96	6.76	97.8	93.6	89.3	87.8
Colombia	65.1	100.0	112.1	99.3	9.96	83.0	83.1	79.5	71.8
Mexico	0.96	100.0	81.3	74.8	71.2	73.1	108.0	9.76	87.3
Peru	136.4	100.0	54.0	53.2	54.8	55.7	56.3	54.2	53.0
Average Latin America (18) Weighted Simple	97.4 85.8	100.0	87.1 96.4	86.0 95.0	81.1 93.7	74.8 92.1	78.2 95.5	75.7 94.2	71.6 90.0

Source: ECLAC, annual averages based on official figures.

weighted by the share of exports to those countries. This index measures, in real terms, units of local currency per U.S. dollar. Thus, a drop in Note: Average of real exchange rate indexes (main official) for each country with respect to the currencies of their main trading partners, the index implies an appreciation or devaluation of the local currency relative to the U.S. dollar. This is referred to as an increase in the exchange rate.

^aAverage January to September.

ence on world markets and to the limitations of international institutions that should be responsible for regulation and policy coordination. Some policies are not in tune with a balanced, well-functioning globalization.²

On the other hand, the recipient countries have a certain amount of leeway in defining their national policy on capital flows. They can passively allow the external changes to be transmitted to their domestic markets, or they can try to moderate or pace them over time, affect the composition of flows, and soften their effects on the exchange rate and aggregate demand.

Although the dramatic growth of international capital markets since the mid-1960s is in part a reflection of the growth of the world economy, including international trade and the globalization of production, it is also associated with purely financial factors, in which changes have occurred at a much faster pace. During the 1970s and the 1980s, many countries began to liberalize their financial sectors and to relax or eliminate foreign exchange regulations. This, together with the revolutionary advances that have taken place in data management, telecommunications technology, and the emergence of increasingly sophisticated financial techniques, contributed to a rapid increase in national and international financial flows.

Latin America took part in this boom during the 1970s, when it accumulated bank debt. During the 1980s, most of the region's links with international private capital markets were broken largely as a result of the debt crisis. After a decade of financial drought, the region again enjoyed a strong expansion of capital flows between 1991 and 1994.

What is often overlooked, however, is the well-documented evidence that these capital flow shifts originated, to a large extent, in the sources of supply. The boom of the early 1990s resulted mainly from conditions in the United States. Domestic recession in the United States, a limited demand for funds, and

very low interest rates led investors to seek other markets.³ Latin America was a very receptive market, offering the expectation of very high rates of return.

The new financial flows initially had a positive effect on Latin America. Thanks to better utilization of installed capacity, production of goods increased beyond the expansion of output capacity by US\$70 billion in 1994, compared with 1990. That is, about one-third of the 3.6 percent rate of annual growth in GDP in 1990–94 corresponded to larger use of installed capacity. This was particularly true in countries like Argentina and Peru.

The increased availability of external financing was clearly beneficial during those years, inasmuch as it removed the external constraints responsible for the decade-long recession in the region. However, renewed access to external capital also posed challenges for the stability and sustainability of macroeconomic equilibrium and jeopardized chances for achieving sounder development. Indeed, the abundance of capital also had an adverse effect on the movement of exchange rates, the money supply and domestic credit, and the accumulation of external debts (many of which had short-term maturities), and thus made the economy more vulnerable to future negative external shocks. ⁴

External financing is obviously a vital ingredient of development; however, it also tends to be very volatile and to fluctuate between surpluses and shortages. Consequently, it is important to design economic policies that will not only attract resources but also ensure that they flow in quantities that are sustainable and directed toward long-term investment rather than consumption.

The Mexican crisis, which exploded in December 1994 and is an example of what is now known as the *Tequila effect*, demonstrates the harm that can come from a country absorbing an excessive amount of external financing over a long period of time, especially when the composition of such financing makes it volatile. Producers and consumers adjusted to a level of overall expenditure that was much higher than potential GDP, and after a while the amounts involved became unsustainable. An adjustment inevitably followed. The 6.6 percent contraction in GDP and the nearly 30 percent drop in capital formation that occurred in Mexico in 1995 were closely associated, first, with a persistent rise in the exchange rate along with a growing current account deficit and, subsequently, with a sharp cutback in capital inflows, which forced the country into a recession and a huge devaluation of the peso despite the extensive international support it received in 1995.

It is wrong to say, as is said surprisingly often, that the Mexican crisis of 1994 could not have been foreseen because of the concealment or absence of information. While it is true that official information on foreign reserves was provided only sporadically, the key data concerning the exchange-rate lag and the high current account deficit, and the fact that it was financed with unstable resources, were available on a regular basis. For instance, in 1992, it was already known that the current account deficit was rising rapidly.5 What was lacking was more comprehensive information. The problem was that neither those on the supply side nor those on the demand side paid enough attention to the available information and that they did not take it seriously until after the crisis exploded. Indeed, the most influential operators usually act with a very limited set of data. This explains why they may suddenly change their minds radically about the economic situation of a country or firm.

In 1995, the Mexican crisis did not have a widespread effect in the region, as it did in 1982. The Argentine economy, however, was seriously affected by the Tequila effect. Although this did not lead to a crisis in terms of a sharp drop in the exchange rate against the currency of trading partners, as some operators had feared in 1995, GDP contracted 5 percent and investment shrank 16 percent. During 1995 the overall growth rate of Latin America fell sharply, to almost zero, while the regional investment ratio also fell by nearly one percentage point of GDP. In 1995, in various countries in Latin America, negative investment flows had been observed in the supply of funds available from instruments such as bonds, deposits, and stock markets. By early 1996, several countries showed GDP rate falloffs for different quarters. In fact, average growth in Latin America was negative in the four quarters between March 1995 and March 1996.

Subsequently, the flow of funds was reactivated, exceeding US\$50 billion in 1996. The resulting economic activity has been significant since the middle of that year. However, some of the same problems displayed in the 1991–94 recovery have been threatening to reappear.

Causes and Consequences of the Mexican Crisis

To review this history, access to external financing was restored throughout Latin America in the early 1990s. The trend was very strong, and most countries in Latin America moved suddenly from shortage to abundance. Nevertheless, recovery was earlier and stronger in some countries, particularly Chile and Mexico.

Far-reaching economic reforms had been implemented during the second half of the 1980s in Mexico while it gradually recovered from the debt crisis of the 1980s. This recovery continued during the 1990s, although investment picked up only moderately. The large supply of funds coming into Mexico in the early 1990s rapidly entered the domestic market, with only a few restrictions on bank indebtedness. The real exchange rate rose quickly.

The nominal exchange rate remained practically fixed from November 1991 until March 1994, even though, officially, it was a flexible crawling rate within a band with a rising ceiling and a constant floor. Mexico's inflation rate, which was higher than

that of its trade partners, especially at the beginning of the period, caused a rapid rise in the real exchange rate.

How were these resources from abroad used? To finance expenditures that greatly exceeded the income earned from production. This trend was mediated by a domestic credit boom, supported by a lack of prudential supervision. As shown in Table 3, the consequent current account deficit expanded from US \$7 billion in 1990 to US\$15 billion in 1991. It continued to expand in subsequent years, reaching US\$29 billion in 1994 (and had been projected by the authorities to grow a further US\$4 billion in 1995). It was an extremely dangerous trend. However, it continued to be encouraged by the market.

Over a four-year period, net external debt grew US\$92 billion, of which only around US\$24 billion was accounted for by foreign direct investment (FDI). This large amount of debt and other liabilities, most of which were hot money, along with the significant exchange rate increase and the correspondingly high current account deficit, were the variables that made Mexico vulnerable and caused the far-reaching recession that began in December 1994. The deterioration of the financial portfolio associated with the domestic credit boom and the large issuance of short-term government bonds in U.S. dollars (*Tesobonos*), which were bought mostly by foreign investors, contributed to the intensity of the Mexican crisis.⁶

Other variables that are usually blamed for the crisis are the rise in U.S. interest rates, the deterioration of the fiscal balance, the monetary policies implemented in 1994, the absence of a pension system based on capitalization, the limitations of the information supplied by Mexico, and the inexcusable way in which the devaluation of December 1994 was implemented (with a sort of preannounced devaluation). Although all these variables had some effect, they were of only secondary importance compared to the significant ex-

change rate increase and the magnitude and duration of the current account deficit that prevailed between 1991 and 1994. The fact that a high proportion of external debt was short-term or easy to liquidate should be particularly noted.⁷

The real exchange rate rise was strong from 1988 onward, and this trend was even more marked during the 1990s (Table 4). Exports grew, but imports did so even more rapidly. The investment rate recovered, but much less than did the rate of capital inflows. Consequently, these external funds further reinforced consumption and crowded out domestic savings. The increase in consumption cannot be attributed to the government, inasmuch as Mexico had achieved fiscal balance after having made a serious and successful effort to eliminate the large budgetary deficit of the mid-1980s. Hence, the excess expenditure occurred mostly in the private sector and was financed with private funds from abroad. One part was intermediated by the banking credit boom, and the other directly by the traders of imported goods. Savings, as a percentage of GDP, fell significantly; between the late 1980s and 1994, national savings (measured at current prices) fell by four percentage points.

During 1994, Mexico experienced several shocks, including the Chiapas uprising, the assassination of the leading presidential candidate, Luis Colossis, and the uncertainty emanating from the election process itself. After some reserve losses, in March a devaluation representing an 8 percent jump from the floor to the ceiling of the existing exchange rate band was implemented. The financial markets were not unduly disturbed by this devaluation. Flows into Mexico and the other Latin American countries continued at high levels. The Mexican economy remained relatively strong that year; GDP rose somewhat more than during the preceding two years, the investment coefficient rose slightly (1 percent of GDP), and the consolidated public sector showed a small deficit (0.3 percent of GDP).

Nevertheless, during that year there were several attacks on the peso, as the exchange rate was at the top of the band and the Bank of Mexico was selling reserves. Despite this, reserves totaled US\$18 billion in October, although they had fallen considerably at some points in 1994. In November, once the presidential elections were over, international risk analysts gave Mexico good grades financially and recommended investing in its assets.

In the meantime, the current account deficit continued to rise. The new authorities in assessing the situation reached the conclusion that they could not postpone making a major correction in the exchange rate and reducing drastically the external deficit. On December 20, a 15 percent devaluation took place. The market then expected additional devaluations and conducted a massive attack on the peso. Authorities freed the exchange rate, which fell a total of 125 percent between late 1994 and the end of 1995.

Essentially, the seeds of the crisis date back to the period between 1992 and 1994, when there was a massive capital inflow, mostly short-term. Aggregate demand grew rapidly until it exceeded the potential GDP; it leaned increasingly toward tradable goods, especially in light of the appreciation of the peso.⁸ Thus, in those years, there was a maladjustment that would inevitably have to be reversed in the future. However, what is extremely important to understand is that the disequilibrium was led and encouraged by capital inflows. Since the public sector was balanced, the disequilibrium was located in the private sector.

Downward adjustment is always painful, and it was painful for Mexico in 1995. GDP contracted 6.6 percent, open unemployment doubled, investment levels dropped by around 30 percent, and the financial sector experienced problems of liquidity and large non-performing portfolios. This had a fiscal cost, arising from support to banks and debtors of over 10 percent of the annual GDP (Reisen, 1996, table 11).

The Shock Spreads to Latin America

Creditors, especially those involved with short-term and more unstable funds, fell prey to mistrust and uncertainty, and expectations were negative. In 1995, Mexico had a net capital outflow of US\$15 billion, after having had a net inflow of US\$31 billion in 1993.

The change in expectations was transmitted to other countries in the region, particularly as regards investment in securities. Prices on the Latin American stock markets, which usually fluctuate a great deal, dropped throughout the region (see Table 5).9 Issues of primary American depository receipts (ADRs) were also discontinued, falling from US\$6 billion in ADRs/global depository receipts (GDRs) in 1993 to US\$5 billion in 1994, and less than US\$1 billion in 1995; issues resumed to a significant extent in 1996.

Unlike in 1982, the shock waves from Mexico did not hit the other Latin American countries with full force, thanks in part to the fact that this time the countries had diversified their sources of external financing. This is a commonly recognized fact; however, other relevant facts tend to be ignored. It is interesting to outline four other relevant differences. First, the 1982 crisis in Mexico came after cutbacks in capital flows that had first been evident in Argentina (1981) and Brazil (1980), but did not spread to other countries in Latin America. Most of them continued to borrow heavily until the explosion of August 1982.

Second, the 1994 explosion in Mexico is equivalent, in terms of the duration of the financial boom, to the expanding cycle of the 1970s being restrained in 1980, or by early 1981 at the latest, when the stock of external liabilities and the current account deficit were much smaller than when the debt crisis came to a head in August 1982. Evidently, the cumulative effect of the imbalances influenced the scope and the cost of the subsequent adjustment. In this regard, the Tequila effect came earlier and enabled many countries to halt the imbalances that were under

Table 5

Latin America: Index of Dollar Prices on the Stock Exchange (indexes August-October 1994 = 100)

Month-Vear	Dec.	Dec.	Dec.	Dec.	June 1994	Sept. 1994	Dec. 1994	June 1995	Dec. 1995	June 1996	Dec. 1996	June 1997	Dec.15 1997
Latin America	24.1	24.1 52.1	54.2	82.2	7.97	102.9	80.9	68.7	66.4	75.6	76.9	106.2	91.5
Argentina	17.3	∞	61.9	103.5	87.3	101.1	77.5	72.2	84.2	97.4	100.1	121.9	112.6
Brazil	11.7	29.0	28.6	54.6	57.8	104.9	91.6	71.7	71.3	85.2	93.1	143.2	103.9
Chile	25.9	4	55.2	71.4	82.3	98.1	100.8	117.3	6.76	96.5	81.0	105.3	83.3
Colombia	15.0	4	55.9	73.7	110.8	102.5	93.4	88.8	9.69	69.1	72.7	90.3	88.5
Mexico	30.0	9	73.0	107.2	9.98	102.8	62.6	45.1	45.7	54.2	53.7	68.7	74.2
Peru	I		51.1	68.9	80.3	105.9	104.8	111.3	114.6	126.6	115.4	156.8	128.9
Venezuela	170.8	24	140.6	125.9	81.7	102.3	91.6	75.1	62.6	97.1	145.2	191.8	174.0

Source: Indexes based on series in International Finance Corporation, Monthly Review of Emerging Stock Markets, several issues.

Note: Index of dollar prices are for values at end of period.

^aAverage of countries considered according to amount of transactions.

way in their own economies, if only temporarily. The adjustments made by Brazil and Peru in 1995–96 are a good example of a timely holdback, which allowed them to cope better with the Asian crisis in 1997.

Third, during the 1980s, the shock of the decline in external financing was aggravated by the fact that international prices (expressed in U.S. dollars) were falling, the terms of trade of Latin American countries had deteriorated, and real interest rates had risen dramatically. In 1994–95, on the other hand, the negative shock in the supply of funding was accompanied by a moderate rise in interest rates, a significant increase in the volume of world trade (9 percent), a 4.5 percent improvement in the terms of trade over the previous two years, and a 9 percent increase in overall external prices (expressed in U.S. dollars), which was associated with the devaluation of the U.S. dollar during that period. The multiple negative external market shocks introduced around 1982 offer a sharp contrast to various positive external shocks around 1994.

Fourth, in 1995, the United States and international financial institutions took a more active and pragmatic approach to the situation. The financial support package offered to Mexico was not only four times bigger in real terms than the one offered in 1982 but also organized more expeditiously. It brought in lines of credit in excess of the amount needed, which helped to moderate expectations and in 1995 provided a net total of US\$25 billion in exceptional financing.

There is no question that the impact of the Mexican crisis on the other Latin American countries, as well as on Mexico itself, would have been much greater had it not been for all these positive "shocks" and good timing.

Nevertheless, the negative impact on Latin America as a whole is quite obvious (Table 1). Annual GDP growth was close to zero in 1995, and per capita GDP fell by 1.5 percent, for the first time

since 1990.¹⁰ The investment rate dropped nearly one percentage point, capital inflows (discounting the nonmarket packages of support to Argentina and Mexico) fell to less than half the level of the preceding three-year period (although it was three times as high as the average for 1983–90, which shows how unstable capital flows can be), and the unemployment rate rose in countries such as Argentina, Mexico, Costa Rica, Paraguay, Uruguay, and Venezuela.

Aside from Mexico, in 1995 GDP fell 5 percent in Argentina, and 2.3 percent in Uruguay (Table 1); in late 1995 and early 1996, it also fell in Peru. Thus, the sharp reduction in external funds did have an impact locally in Latin America, where most financing was short-term and volatile, and in countries engaged in heavy trading with countries that were affected by the financial shock (as in the case of Uruguay).

An external deficit that could be financed with capital inflows for one or two years could hardly be financed for four or five years. The "positive shock" of regaining access to external financing at the beginning of the decade enabled and encouraged Mexico to continue increasing its external debt and other foreign liabilities. The resulting exchange-rate increase contributed significantly toward reducing inflation. This was the cost of the shortsightedness of suppliers, who saw only the merits of the many achievements made by Mexico—such as the dramatic improvement of its fiscal position—but did not recognize the problems that were still there (poverty and low levels of investment) or were being created (external deficit and a growing stock of volatile liabilities).

Reducing Vulnerability: The Case of Chile

Chile's performance in 1995–96 was the opposite of Mexico's, despite the numerous similarities during the years before 1994.

Dissimilar policy inputs explain the differences. The most pronounced divergences relate to the macroeconomic policies in the external sector, mainly, regulation of capital movements, exchange rate policy, and prudential supervision of the financial system.¹¹

Both the Mexican crisis and Chile's strength were built up over time. Toward the end of the 1980s, both countries already had opened up their trade considerably, their budgets had improved substantially, privatization was well under way, annual inflation was around 20 percent, and the two countries had similar domestic savings rates. The reason Chile performed better in 1995 is that, faced with an abundance of external funds in 1990-94, it deliberately followed a cautious policy in the last few years. Instead of spending all the external resources available, which would have led to a significant appreciation of the peso, it discouraged short-term capital inflows. In 1991, a tax was imposed, and substantial non-interest-bearing reserves for external credit were required; the reserve requirement was subsequently extended to deposits in foreign currencies and investment in stocks, while primary issues and foreign venture capital were exempted. The measures adopted effectively discouraged inflows of speculative capital.

In Chile, foreign loans are now subject to a 1.2 percent tax; non-interest-bearing reserves in the Central Bank of 30 percent for one year (or payment of the financial equivalent), independent of the maturity term of the inflow, are required for foreign-currency deposits and investment in secondary ADRs. Loans involving foreign investments are subject to reserve requirements, and although venture capital in "productive investment" is exempted, it must be held in Chile for at least one year. The financial system is subject to relatively strict prudential regulation, including selective supervision of assets and required provisioning as well as restrictions and drastic penalties on operations with related parties.

This explains why in late 1994 Chile had a moderate external deficit, high international reserves, a modest and manageable short-term debt, a domestic savings rate that was rising instead of falling (as was the case in Mexico and Argentina), a level of domestic investment that since 1993 (not before) was the highest recorded in its history, and an exchange rate that in 1994 was comparatively closer to equilibrium than that of most of the countries on the continent (Table 3). One loophole was left—in the stock exchange, where trading was heavy in 1994. As a result, some problems emerged in the local stock market, where prices experienced a drop associated to a capital outflow; the loophole was addressed in 1995 by extending the application of the 30 percent reserve requirement to secondary ADRs.

It is useful to recall what happened in Chile in 1982, when it suffered the worst crisis in Latin America that year: Its GDP contracted by 15 percent. Chile had already implemented far-reaching financial and trade reforms, and, between 1973 and 1979, it had carried out a broad privatization effort. It had a fixed exchange rate, which was frozen in nominal terms and was rising in real terms between 1979 and 1982 in a process led by capital inflows, and had decided not to implement a monetary policy (a policy recipe of the "monetary approach to the balance of payments," which is equivalent to a "currency board") and to maintain an open capital account, with an increasing dollarization of domestic debt and very lax bank supervision. These were the main causes of the magnitude of the crisis of 1982.

Between 1977 and 1981, the Chilean economy adjusted to rising levels of external financing, but these inflows began to slow down in late 1981. However, the external gap continued to widen, and thus the reserves that had accumulated began to be depleted rapidly. The government maintained that in a "sound and free" economy, the proper course of action was to pursue passive, neutral policies in the face of a loss of reserves and the

decline of monetary liquidity. As a result, during the first half of 1982, GDP fell sharply, industrial production dropped by 19 percent, open unemployment rose to 20 percent, and the bank insolvencies increased. It was not until June 1982 that the government partially corrected its economic policy and implemented a major devaluation of the currency, among other measures. Since this response was already overdue, it obviously had a traumatic impact, particularly in view of the fact that a serious recession had already been under way for several months. The depth of the Chilean crisis of the early 1980s helps explain why in the 1990s the present economic authorities have so cautiously but actively managed the macroeconomic variables and the regulation of the financial system so as to avoid the risk of another crisis.

Emerging East and Southeast Asia: The New Victim of Financial Instability

The Asian crisis is still very recent, and there is a significant diversity among the countries affected. Even at this early stage, however, the crisis reveals some similarity with prior Latin American experiences. During 1995 the Tequila effect on Asia was negligible. This was so even in countries like Malaysia and Thailand whose economies carried large current account deficits. As a consequence, in 1996 many outstanding researchers and observers asserted that those deficits were not relevant if investment ratios and growth were high. Thailand was one of those cases. In late 1996, an International Monetary Fund (IMF) report praised Thailand as being on the "road to sustained growth."

A few Asian countries had rather free capital flows, but several others had regulated capital inflows and exchange markets successfully for long periods, and many had executed effective second-level sterilization policies. Growth was actually sustained

and extremely high. In 1980–95, GDP yearly growth averaged between 6 and 8 percent in the Republic of Korea, Indonesia, Malaysia, and Thailand; the investment ratio exceeded 33 percent, with domestic savings ratios close to that level; the annual rate of inflation was low, in the 5 percent range; and fiscal budgets were generally balanced. In the meantime, average GDP growth in Latin America was 2 percent, and the ratio of investment to GDP fluctuated around 20 percent.

What explains the sudden inverted comparative perceptions of Asia and Latin America in 1997?

First, what works for several years might not work forever. In fact, after a couple of successful decades, the exports of several Asian economies recently have suffered problems. What had been, until then, products with dynamic demand now appeared to have reached "maturity," and faced tightening markets.

Second, even if exports remain strong, a disequilibrium can develop if imports experience a boom. In both South Korea and Thailand, imports expanded sharply in 1995–96. This boom was related to greater aggregate demand and cheaper imports (because of some import liberalization together with a rise in exchange rates, in an apparent "Latin-Americanization" of some Asian economies). Both factors resulted from increased capital inflows.

Third, good sustained policies can be reversed under exogenous pressures. The strong drive toward financial liberalization prevailing in the world today had also permeated Asia. Actually, the current account deficit increased substantially in Thailand after 1995; Korea also experienced a shift from a negligible deficit in 1992–94 to a 5 percent deficit in 1996. These external deficits were not led by government deficits and did not imply losses of international reserves. Neither were they an exogenous increase of private expenditure. On the contrary, they were due to a rise in private expenditure led by capital inflows.

In South Korea, Indonesia, Malaysia, and Thailand, international reserves fed by capital inflows accumulated persistently between 1992 and early 1997, pressing local authorities to purchase foreign currency. Reserves more than doubled in those countries in that period. It was a phenomenon financed by capital inflows, in excess of the current account deficit, which sustained increasing exchange rates (though a moderate trend), and a strongly increased aggregate demand, with a widening of the current account deficit in South Korea, Indonesia, and Thailand. The additional financing was mostly short-term. In the case of Thailand, between 1994 and 1996, short-term capital inflows totaled 7-10% of GDP annually. Inflows contributed to a domestic lending boom, with bubbles in real estate prices. Weaknesses in prudential supervision, not so relevant in the previously repressed domestic markets, became evident.

Lessons for Latin America

Optimism regarding Latin America returned to the international financial markets in 1996–97. The net capital inflow climbed to the precrisis levels. Decline in GDP growth rates in various countries was reversed. In fact, since mid-1996 the region as a whole has experienced dynamic growth, with GDP rising 5.3 percent in 1997 (Table 1).

Nevertheless, it should be noted that the revival of GDP growth is mostly a recovery of earlier levels, that is, the reapproaching of effective GDP to the production frontier. However, the frontier moves forward slowly because productive investment is still low, while real exchange rates keep rising. Consequently, as long as productive investment does not increase substantially (and it is still notably lower than in East and Southeast Asia), that rate of growth is not sustainable in 1998. Moreover, the Asian crisis will worsen the terms of trade

and the access of Latin American exports. Then the region will experience a new adjustment, although this time without a crisis. The future, however, will depend on whether the region and the most influential people (i.e., the international institutions and the United States) have learned the lesson. The signals are very mixed.

GDP recovery in Argentina and Mexico has been particularly vigorous, although after the nearly 6 to 7 percent decline in both countries, thanks to the Tequila effect, there was a large gap between effective GDP and productive capacity. ¹³ This enabled a significant reactivation to take place. Nevertheless, in both countries GDP per capita during 1997 was approaching the levels achieved before the Tequila effect, while average wages were still lower. This is the cost of policies implemented before the crisis, rather than from policies adopted in 1995–96. The following lessons can be derived.

Level, Composition, and Sustainable Uses of Flows

It is important to ensure that the inflow of funds is directed toward productive investment; allowing too much to drain off into investments on the stock exchange and consumption of imported goods will create bubbles and imbalances that are unsustainable. In addition, fast-rising stocks of external financial liabilities tend to be increasingly dangerous.

Opening up the capital account indiscriminately can be detrimental to productive development and to the welfare of the majority of people, inasmuch as externalities and other imperfections of international capital markets give rise to frequent cycles of abundance and shortage of external financing. The instability of exchange rates and of macroeconomic indicators that is usually associated with unrestricted openness is always costly in terms of production and equity. Effective, efficient regulation

is possible; Chile proved this from 1991 onward, and Colombia did so during the 1970s as well as in recent years.

Avoiding Outlier Prices and Ratios

Governments must ensure that capital flows do not generate atypical (outlier) prices or significant distortions of basic macroeconomic indicators, such as interest rates and real exchange rates, the composition of expenditure in terms of consumption and investment, and the production of tradable goods.

The fact that exports are growing vigorously does not justify the assumption that improvements in productivity will offset a lag in the exchange rate, as economic authorities have repeatedly claimed. If imports are growing steadily, and at a faster rate than exports, there is reason to be concerned, and corrective measures should be taken in time to prevent an unsustainable accumulation of external liabilities.

Governments should not use capital inflows as the main tool for achieving a narrow or extreme objective related to a single domestic economic variable, especially over a long period of time; a case in point is the effort to halt inflation by raising the exchange rate. This tends to throw other major variables off balance, thus affecting the very instruments being used (i.e., the exchange rate and capital flows) and weakening the basis for sustainable growth. In particular, it is very risky to discard implementing an exchange rate policy by remaining bound to a fixed nominal rate. The methods to regulate the exchange rate can be extremely diverse; several of them involve some form of an exchange rate crawling band, with some type of intramarginal intervention.

Controls, of whatever type they may be, are often seen as inefficient and easy to get around, considering the increasing sophistication of transactions on the capital market. Some controls on capital can indeed be clumsy and costly, as was the case in Venezuela in 1994–95. However, statements about the ineffectiveness of controls on capital flows are highly exaggerated. Capital-flow regulation tends to be effective as long as it is oriented to the predominance of midterm forces over short-term fluctuations in domestic markets. The regulation will indeed have a microeconomic cost, but this cost should be balanced against the social benefits in terms of macroeconomic stability, investment, and growth.

The recent experience of Latin America has shown dramatically that allowing the market, dominated by agents with short horizons, to determine the volume and composition of capital flows can have a very high cost for the recipient country.

Consistent Sequencing

With regard to the sequence of reforms, it is generally agreed that the opening up of the capital account was premature and should have been postponed until other major reforms had been consolidated and new equilibrium prices had been set. The lesson to be learned from this experience is that, during structural adjustment, open capital accounts (especially when international financing is abundant) can increase the capital flows too rapidly and have destabilizing macroeconomic and sectoral effects.

In the particular case of Latin America, many countries conducted deep trade reforms in the 1990s pari passu with exchange rate increases. If productive investment capacity reacts slowly or with a lag and domestic financial markets remain incomplete and poorly supervised, additional external resources cannot be absorbed efficiently in the domestic economy, and thus they threaten the future stability of the flows themselves. Fiscal parameters need to be consolidated, since in the absence of a sound

tax base and flexible fiscal mechanisms, the authorities will have to depend excessively on monetary policy to regulate aggregate demand. Since part of the aggregate demand generated by capital flows is inevitably spent on nontradable goods, when actual demand comes close to the production frontier, the relative price of nontradables tends to rise. This in turn is reflected in a higher current account deficit. A real revaluation of the currency can obviously distort the allocation of resources and investment, seriously weakening the structural midterm objective of penetrating external markets with new exports (ECLAC, 1995; World Bank, 1997).

Flexible Selective Regulation

It is not wise to make an inflexible commitment to keep the capital account open, particularly in light of the crucial importance of maintaining macroeconomic stability and the disproportionate volume of the international capital markets compared with the small size of Latin American markets. These are serious shortcomings of both domestic and international financial markets. As long as market movements depend to a significant extent on short-term transactions and domestic securities markets remain shallow, there will be a risk of great instability in this new modality of linkages with the international economy. In fact, Mexico's and Thailand's recent critical experiences attest to the wisdom of discouraging large financial inflows and increasing accumulation of short-term external liabilities. There is growing evidence that the greater the instability of flows (or deviation from the trend), the lesser the share directed to productive investment.

It should be stressed that after the crisis in Mexico in 1994, institutions such as the IMF (in its 1995 report on *International Capital Markets*); the Bank for International Settlements (in its *Annual Report 1995*); and the World Bank (in *Private Capital Flows to Developing Countries*, 1997) have recognized the advisability

of taking steps to discourage excessive inflows of short-term capital as part of an efficient macroeconomic management of capital flows. Also, the presidents of the member countries of the Río Group have expressed their concern regarding capital flow volatility. In this regard, following arduous negotiations on a trade and financial agreement between Canada and Chile, it was agreed that Chile could maintain regulations on capital inflows with a broad range of flexibility. This is a precedent of great significance for achieving sustainable stability and growth. Better understanding of the workings of domestic and international financial markets is at the core of the future of the world economy. What is needed is more pragmatism and more systematic efforts.

Notes

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- 1. The presence of significant disequilibriums, in a framework of repeated statements regarding the need to maintain macroeconomic equilibrium, reveals inadequate comprehension of how to achieve those equilibriums in order to make it sustainable and consistent with development (see Ffrench-Davis, 1996).
- 2. The Canadian finance minister, Paul Martin, recently declared that "we have devoted almost all our time to make globalization happen and not to make it work right. . . . We are spending energy in solving crises rather than avoiding them" (Martin, 1997).
- 3. Between 1989 and 1993, the London interbank offered rate (LIBOR) in dollars, at 180 days, fell from 9.3 to 3.4 percent; rates for the same term on the U.S. money markets fell from 9.2 to 3 percent (International Monetary Fund, *International Financial Statistics*, Washington, D.C., various issues). Background on interest rates in Latin America can be found in ECLAC (1995), chap. 9.
- 4. It should be recalled that several Latin American countries were liberalizing their import regimes at the same time they were raising exchange rates. See ECLAC (1995), chap. 5.
- 5. By mid-1992, we had already advised that a significant tendency to raise exchange rates was in process, which would become dangerous if not stopped (*see* Ffrench-Davis, 1992). At the same time, since the beginning of 1991, the Central Bank of Chile was moving forward in the regulation of capital inflows and the strengthening of an active exchange rate policy.
- 6. The worsening of the financial portfolio is not an exogenous phenomenon. It responds to the slackening of standards of prudential supervision and to a large

bank credit boom (Sachs, Tornell, and Velasco, 1996b). The credit boom was closely associated with a capital inflow surge in Chile in 1977–81, Mexico in 1991–94, and Thailand in 1994–96.

- 7. With regard to the savings rate and the pension system, it should be noted that during 1987 and 1988, Mexico and Chile had similar rates of national savings. During that period, the private pension system had already been operating in Chile for seven years. By 1994, Chile's savings rate had risen by three percentage points, while Mexico's had fallen by four percentage points as compared with the average of 1987–88 (Uthoff and Titelman, 1997). These data suggest that the main determinant of the difference between Chile and Mexico was not a mechanism that had already existed in Chile since the early 1980s but, rather, the different policy approaches originating principally during the 1990s. The major differences between the Chilean and Mexican economic policies of the 1990s are related not to structural reforms, such as those carried out in the areas of trade, state ownership, or fiscal balance, but, rather, to the treatment of capital flows, exchange rate policies, and (since 1986) prudential supervision, which are essential ingredients of macroeconomic performance.
- 8. Although expenditures exceeded GDP, productive capacity was probably larger than actual GDP, with an underutilization of the productive capacity of importables and of potentially exportable goods under a lower exchange rate. Thus, this might explain the sizable response of the output of tradables to the real devaluation in 1995.
- 9. Frankel and Schmukler (1996) consider that both Latin American and Asian stock markets suffered from the Mexican shock, but that the effects were more direct and stronger in Latin America. On the other hand, within the latter, countries like Chile were less affected; meanwhile in Asia, the Philippines was more strongly hit than other Asian countries. The differences appear to be associated to policy-led "fundamental factors."
- 10. The combined GDP of Argentina, Brazil, Mexico, Peru, and Uruguay (representing 75 percent of regional GDP) fell on average by 2 percent between April 1995 and March 1996.
- 11. A review of macroeconomic policies during President Patricio Aylwin's government is in Ffrench-Davis and Labán (1996).
- 12. The figures in Table 3 regarding the real exchange rate series should be adjusted by the evolution of the relevant relative productivity. The record suggests that the latter has progressed more in Chile than in other countries in Latin America.
- 13. A decline of 6.6 percent in Mexico in 1995 over 1994, and of 6 percent in Argentina between April 1995 and March 1996, compared with the previous year.

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